- 3. (Amended) A compound of formula (I) according to claim 1 [or 2], wherein substituents on the group R³ when attached to nitrogen are selected from halogen, hydroxy, acyl, acyloxy, or amino groups.
- 4. (Amended) A compound of formula (I) according to claim 1[, 2 or 3,] wherein Ar represents unsubstituted or substituted divalent phenylene, naphthylene, pyridyl, quinolinyl, benzofuryl, dihydrobenzofuryl, benzopyranyl, indolyl, indolinyl, azaindolyl, azaindolyl, pyrazolyl, benzothiazolyl, or benzoxazolyl.
- 5. (Amended) A compound of formula (I) according to [claims 1, 2, 3 or 4,] <u>claim 1</u> wherein substituents on the group represented by R⁶ are selected from halogen, hydroxy, or nitro or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, aralkoxyalkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, arylamino, aminoalkyl, aryloxy, alkoxycarbonyl, alkylamino, alkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid or its derivatives, or sulfonic acid or its derivatives.

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8. (Amended) A process for the preparation of compound of formula (I)

where X represents O or S; the groups R¹, R² and group R³ when present on carbon atom,

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A2 Wil may be same or different and represent hydrogen, halogen, hydroxy, nitro, cyano, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acylòxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; or R¹, R² along with the adjacent atoms to which they are attached may also form a 5-6 membered substituted or unsubstituted cyclic structure containing carbon atoms with one or more double bonds, which may optionally contain one or more heteroatoms selected from oxygen, nitrogen and sulfur; R³ when attached to nitrogen atom represents hydrogen, hydroxy, formyl or unsubstituted or substituted groups selected from alkyl, cyclealkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; the linking group represented by -(CH₂)_n-O- may be attached either through nitrogen atom or through carbon atom where n is an integer ranging from 1-4; Ar represents\an unsubstituted or substituted divalent single or fused aromatic or heterocyclic group; R⁴ represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, unsubstituted or substituted aralkyl group or forms a bond together with the adjacent group R⁵; R⁵ represents hydrogen, hydroxy, alkoxy, halogen, Carl Cont

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lower alkyl group, acyl, unsubstituted or substituted aralkyl or R⁵ forms a bond together with R⁴; R⁶ represents unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups, R⁷ represents hydrogen and Y represents oxygen atom, which comprises: hydrolising a compound of formula (I) <u>as</u> defined [described] in [any of the claims 6 and 7] <u>claim 6</u>, where R⁷ represents unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups and all other symbols are as defined earlier.

25. (Amended) A pharmaceutical composition which comprises a compound of formula (I)

A

$$\begin{array}{c|c}
R^{1} & X \\
N & R^{2} & R^{5} & O \\
R^{2} & R^{3} & R^{6}O
\end{array}$$
(I)

as defined in [claims 1-5, 10-13, or 24] <u>claim 1</u>, and a pharmaceutically acceptable carrier, diluent, excipient or solvate.

X4

27. (Amended) A method of preventing or treating hyperlipemia, hypercholesteremia, hyperglycemia, osteoporosis, obesity, glucose intolerance, leptin resistance, insulin resistance, or diseases in which insulin resistance is the underlying pathophysiological mechanism comprising administering a compound of formula (I) as defined in claim 1

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[claims 1-5, 10-13 or 24 or a compound as claimed in claim 24 or a pharmaceutical composition as claimed in claims 25 and 26] to a patient in need thereof.

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- 29. (Amended) A method according to claim 28, for the treatment or prophylaxis of disorders related to Syndrome X, which comprises administering an agonist of PPARα [and/or], PPARγ or a mixture thereof of formula (I).
- 30. (Amended) A method of reducing plasma glucose, triglycerides, total cholesterol, LDL, VLDL and free fatty acids in the plasma comprising an effective amount of compound of formula (I) as defined in <u>claim 1</u> [any one of claims 1-5, 10-13 or 24 or a pharmaceutical composition as claimed in claims 25 and 26] to a patient in need thereof.
- 31. (Amended) A method of preventing or treating hyperlipemia, hypercholesteremia, hyperglycemia, osteoporosis, obesity, glucose intolerance, leptin resistance, insulin resistance, or diseases in which insulin resistance is the underlying pathophysiological mechanism comprising administering a compound of formula (I) as defined in claim 1, [any one of claims 1-5, 10-13 or 24 or a pharmaceutical composition as claimed in claim 25 and 26] in combination/concomittant with HMG CoA reductase inhibitors, fibrates, nicotinic acid, cholestyramine, colestipol or probucol which may be administered together or within such a period as to act synergestically together to a patient in need thereof.

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34. (Amended) A method of reducing plasma glucose, triglycerides, total cholesterol, LDL, VLDL and free fatty acids in the plasma, which comprises administering a

A4 wit compound of formula (I) claimed in claim 1 [any one of claims 1-5, 10-13 or 24 or a pharmaceutical composition as claimed in claims 25 and 26] in combination/concomittant with HMG CoA reductase inhibitors or fibrates or nicotinic acid or cholestyramine or colestipol or probucol which may be administered together or within such a period as to act synergestically together to a patient in need thereof.

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57. (Amended) A method for preventing or treating hyperlipemia, hypercholesteremia, hyperglycemia, osteoporosis, obesity, glucose intolerance, leptin resistance, insulin resistance, or diseases in which insulin resistance is the underlying pathophysiological mechanism comprising administering a compound of formula (IIIm) as defined in claim 53 [or a pharmaceutical composition as claimed in claims 55 or 56 to a patient in need thereof].

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60. (Amended) A method of preventing or treating hyperlipemia, hypercholesteremia, hyperglycemia, osteoporosis, obesity, glucose intolerance, leptin resistance, insulin resistance, or diseases in which insulin resistance is the underlying pathophysiological mechanism comprising administering a compound of formula (IIIm) as defined in claim 53 [or a pharmaceutical composition as claimed in claims 55 or 56] in combination/concomittant with HMG CoA reductase inhibitor, fibrates, nicotinic acid, cholestyramine, colestipol or probucol which may be administered together or within such a period as to act synergestically together to a patient in need thereof.

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63. (Amended) A method of reducing plasma glucose, triglycerides, total

cholesterol, LDL, VLDL and free fatty acids in the plasma, which comprises administering a compound of formula (IIIm) claimed in claim 53 [or a pharmaceutical composition as claimed in claim 55 or 56] in combination/concomittant with HMG CoA reductase inhibitors, fibrates, nicotinic acid, cholestyramine, colestipol or probucol which may be administered together or within such a period as to act synergestically together to a patient in need thereof.

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64. (Amended) Amethod of reducing plasma glucose, triglycerides, total cholesterol, LDL, VLDL and free fatty acids in the plasma, which comprises administering a compound of formula (IIIm) as claimed in claim 53 [or a pharmaceutical composition as claimed in claim 55 or 56] to a patient in need thereof.

Please add the following new claims:

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-- 65. A process for the preparation of compound of formula (I)

$$R^{1}$$
 N
 R^{2}
 N
 R^{3}
 R^{4}
 R^{5}
 N
 R^{7}
 R^{7}
 R^{7}
 R^{7}
 R^{7}

where X represents O or S; the groups R¹, R² and group R³ when present on carbon atom, may be same or different and represent hydrogen, halogen, hydroxy, nitro, cyano, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino,

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arylamino, aralkylamino, aminoalkyl, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; or R¹, R² along with the adjacent atoms to which they are attached may also form a 5-6 membered substituted or unsubstituted cyclic structure containing carbon atoms with one or more double bonds, which may optionally contain one or more heteroatoms selected from oxygen, nitrogen and sulfur; R3 when attached to nitrogen atom represents hydrogen, hydroxy, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, hydroxyalkyl, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aminoalkyl, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, thioalkyl groups, carboxylic acid derivatives, or sulfonic acid derivatives; the linking group represented by -(CH₂)_n-O- may be attached either through nitrogen atom or through carbon atom where n is an integer ranging from \ 4; Ar represents an unsubstituted or substituted divalent single or fused aromatic or heterocyclic group; R⁴ represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, unsubstituted or substituted aralkyl group or forms a bond together with the adjacent group R5; R5 represents hydrogen, hydroxy, alkoxy, halogen, lower alkyl group, acyl, unsubstituted or substituted aralkyl or R⁵ forms a bond together with R4; R6 represents unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxyalkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl, or heteroaralkyl groups, R\represents

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hydrogen and Y represents oxygen atom, which comprises: hydrolising a compound of formula (I) as defined in claim 7, where R⁷ represents unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, or heteroaralkyl groups and all other symbols are as defined earlier.

66. A pharmaceutical composition which comprises a compound of formula (I)

$$\begin{array}{c|c}
R^{1} & X \\
N & N \\
R^{2} & N \\
R^{3} & R^{5} & O \\
R^{6}O & YR^{7}
\end{array}$$
(I)

as defined in claim 24 and a pharmaceutically acceptable carrier, diluent, excipient or solvate.

- 67. A pharmaceutical composition as claimed in claim 66, in the form of a tablet, capsule, powder, syrup, solution or suspension.
- 68. A method of preventing or treating hyperlipemia, hypercholesteremia, hyperglycemia, osteoporosis, obesity, glucose intolerance, leptin resistance, insulin resistance, or diseases in which insulin resistance is the underlying pathophysiological mechanism comprising administering a compound of formula (I) as defined in claim 24.
- 69. A method according to claim 68, wherein the disease is type II diabetes, impaired glucose tolerance, dyslipidaemia, disorders related to Syndrome X such as hypertension, obesity, atherosclerosis, hyperlipidemia, coronary artery disease and other cardiovascular disorders, certain renal diseases including glomerulonephritis, glomerulosclerosis,

nephrotic syndrome, hypertensive nephrosclerosis, retinopathy, nephropathy, disorders related to endothelial cell activation, psoriasis, polycystic ovarian syndrome (PCOS), useful as aldose reductase inhibitors, for improving cognitive functions in dementia and treating diabetic complications, osteoporosis, inflammatory bowel diseases, myotonic dystrophy, pancreatitis, arteriosclerosis, xanthoma or cancer.

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- 70. A method according to claim 69, for the treatment or prophylaxis of disorders related to Syndrome X, which comprises administering an agonist of PPARα, PPARγ or a mixture thereof of formula (I).
- 71. A method of reducing plasma glucose, triglycerides, total cholesterol, LDL, VLDL and free fatty acids in the plasma comprising an effective amount of compound of formula (I) as defined in claim 24, to a patient in need thereof.
- 72. A method of preventing or treating hyperlipemia, hypercholesteremia, hyperglycemia, osteoporosis, obesity, glucose intolerance, leptin resistance, insulin resistance, or diseases in which insulin resistance is the underlying pathophysiological mechanism comprising administering a compound of formula (I) as defined in claim 24, in combination/concomittant with HMG CoA reductase inhibitors, fibrates, nicotinic acid, cholestyramine, colestipol or probucol which may be administered together or within such a period as to act synergestically together to a patient in need thereof.

73. A method according to claim 72, wherein the disease is type II diabetes, impaired glucose tolerance, dyslipidaemia, disorders related to Syndrome X such as hypertension, obesity, atherosclerosis, hyperlipidemia, coronary artery disease and other cardiovascular disorders, certain renal diseases including glomerulonephritis, glomerulosclerosis, nephrotic syndrome, hypertensive nephrosclerosis, retinopathy, nephropathy, disorders related to endothelial cell activation, psoriasis, polycystic ovarian syndrome (PCOS), useful as aldose reductase inhibitors, for improving cognitive functions in dementia and treating diabetic complications, osteoporosis, inflammatory bowel diseases, myotonic dystrophy, pancreatitis, arteriosclerosis, xanthoma or cancer.

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- 74. A method according to claim 73, for the treatment or prophylaxis of disorders related to Syndrome X, which comprises administering a compound of formula (I) in combination with HMG CoA reductase inhibitors, fibrates, nicotinic acid, cholestyramine, colestipol or probucol which may be administered together or within such a period as to act synergestically together.
- 75. A method of reducing plasma glucose, triglycerides, total cholesterol, LDL, VLDL and free fatty acids in the plasma, which comprises administering a compound of formula (I) claimed in claim 24, in combination/concomittant with HMG CoA reductase inhibitors or fibrates or nicotinic acid or cholestyramine or colestipol or probucol which may be administered together or within such a period as to act synergestically together to a patient in need thereof.

76. A method according to claim 74, for the treatment of prophylaxis of disorders related to Syndrome X, which comprises administering an agonist of PPAR α , PPAR γ or a mixture thereof of formula (I).--

Respectfully submitted,

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